

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of bonding a first object having a polymer surface together with a second object having an electrically conductive or semiconductive surface, the method comprising the steps of:

a) electrografting ~~an organic~~ a polymer film onto the conductive or semiconductive surface of the second object; and then

b) bonding the polymer surface of the first object to the polymer film electrografted onto the conductive or semiconductive surface of the second object ~~thus-grafted~~;

wherein the electrografting of the polymer film is an electroinitiated grafting, and wherein which the polymer film is obtained from compounds selected from the group consisting of monomers and prepolymers that are partly or completely functionalized by cyclic groups that can be cleaved by nucleophilic or electrophilic attack.

2-7. (Canceled)

8. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the bonding ~~consists of~~ includes a hotmelt bonding ~~or cold bonding or a combination thereof~~.

9. (Currently Amended) The method as claimed in claim 8, , ~~in which~~ wherein the cold bonding is carried out by means of a substance capable of dissolving or swelling the polymer surface to be bonded and the organic film electrografted onto the conductive or semiconductive surface.

10. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the polymer constituting the polymer surface is selected from the group consisting of polyethylenes, polypropylenes, polystyrenes, polyacrylonitriles, polysiloxanes, polyesters, polyorthoesters,

polycaprolactones, polybutyrolactones, polyacrylics, polymethacrylics, polyacrylamides, epoxide resins, copolymers thereof and blends thereof.

11. (Currently Amended) The method as claimed in claim 1, , ~~in which~~ wherein the polymer constituting the polymer surface ~~[[is]]~~ includes a hotmelt polymer.

12. (Currently Amended) The method as claimed in claim 1, , ~~in which~~ wherein the polymer surface ~~[[is]]~~ includes a polymer film coating a conductive or semiconductive material.

13. (Withdrawn) A method of manufacturing or renovating composites intended for the aerospace, aeronautical, automotive, biomedical, microelectronics and microsystems industries ,which comprises a step consisting in bonding two objects together by the method of claim 1.

14. (Withdrawn) A method of manufacturing implantable surgical and medical instruments ,which comprises a step consisting in bonding two objects together by the method of claim 1.

15. (Withdrawn) A method of assembling sensitive components of microsystems which comprises a step consisting in bonding two objects together by the method of claim 1.

16. (Withdrawn) A structure comprising two objects, one of which has an electrically conductive or semiconductive surface and the other has a polymer surface, these surfaces being bonded to each other via an organic film with a thickness of less than 1 μm .

17. (Withdrawn) A method of packaging of Microsystems, which comprises a step consisting in bonding two objects together by the method of claim 1.

18. (Currently Amended) The method as claimed in claim 1, ~~in which~~ wherein the ~~organic~~ polymer film has a thickness of between 50 and 300 nm.

19. (New) A method for bonding a first object having a polymer surface together with a second object having an electrically conductive or semiconductive surface, the method comprising the steps of:

a) electrografting an organic film onto the conductive or semiconductive surface of the second object; and then

b) bonding the polymer surface of the first object to the polymer film electrografted onto the conductive or semiconductive surface of the second object thus grafted,

wherein the bonding includes a cold bonding or a combination of the cold bonding and a hotmelt bonding, and

wherein the cold bonding is carried out by means of a substance capable of dissolving or swelling the polymer surface to be bonded and the organic film electrografted onto the conductive or semiconductive surface.

20. (New) The method as claimed in claim 19, wherein the electrografting of the organic film includes an electroinitiated grafting.

21. (New) The method as claimed in claim 20, wherein the organic film includes a polymer film.

22. (New) The method as claimed in claim 21, wherein the polymer film is obtained from compounds selected from the group consisting of monomers and prepolymers that are partly or completely functionalized by vinyl groups.

23. (New) The method as claimed in claim 22, wherein the polymer film is obtained from a vinyl monomer selected from the group consisting of acrylonitrile, methacrylonitrile, acrylates and methacrylates, acrylamides, methacrylamides, cyanoacrylates, acrylic acid, methacrylic acid, styrene, vinyl halides, N vinylpyrrolidone, 2 vinylpyridine, 4 vinylpyridine and vinyl-terminated telechelic compounds.

24. (New) The method as claimed in claim 21, wherein the polymer film is obtained from compounds selected from the group consisting of monomers and prepolymers that are

partly or completely functionalized by cyclic groups that can be cleaved by nucleophilic or electrophilic attack.

25. (New) The method as claimed in claim 20, wherein the organic film is obtained from diazonium, sulfonium, phosphonium or iodonium salts, or mixtures thereof.

26. (New) The method as claimed in claim 19, wherein the polymer constituting the polymer surface is selected from the group consisting of polyethylenes, polypropylenes, polystyrenes, polyacrylonitriles, polysiloxanes, polyesters, polyorthoesters, polycaprolactones, polybutyrolactones, polyacrylics, polymethacrylics, polyacrylamides, epoxide resins, copolymers thereof and blends thereof.

27. (New) The method as claimed in claim 19, wherein the polymer constituting the polymer surface includes a hotmelt polymer.

28. (New) The method as claimed in claim 19, wherein the polymer surface includes a polymer film coating a conductive or semiconductive material.

29. (New) The method as claimed in claim 19, wherein the organic film has a thickness of between 50 and 300 nm.

30. (New) The method as claimed in claim 1, wherein the bonding includes a cold bonding.

31. (New) The method as claimed in claim 1, wherein the bonding includes a combination of a hotmelt bonding and a cold bonding.